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10/635,364	08/06/2003	Jiming Mei	LIFENHANCER INC-PA-2	8887
7590		09/17/2007	EXAMINER	
OBER / KALER		CHAPEL, DEREK S		
c/o Royal W. Craig		ART UNIT		
120 East Baltimore Street		PAPER NUMBER		
Baltimore, MD 21202		2872		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/635,364

Applicant(s)

MEI ET AL.

Examiner

Derek S. Chapel

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 August 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☒ Claim(s) 1-7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Status Of Claims***

1. Claims 1-7 are pending for examination as interpreted by the examiner.

### ***Drawings***

2. The drawings were received on 8/6/2003. These drawings are accepted.

### ***Claim Objections***

3. Claims 1-6 are objected to because of the following informalities: in the fifth line of claim 1, ",", should be changed to --;--. Appropriate correction is required. Claims 2-6 are objected to for inheriting the informalities through their dependency from claim 1.
4. Claim 7 recites the limitation "the slide holder", "the slide", "the holder", "the side" and "the microarray" in the first, second and third lines. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 1 and 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deppe et al, International Publication WO 02/18052 A1 (hereafter Deppe) in view of Ruddle et al, U.S. Patent Number 4,415,405 (hereafter Ruddle).

9. As to claim 1, Deppe discloses three walls (see figure 2, element 4 of Deppe; it is noted that U.S. Patent Application Publication 2003/0184745 A1 may be used as an English translation of sorts) surrounding a base (see figure 2, element 3 and the English abstract of Deppe) and four semi-circular tabs (see figure 2, element 6 and the English abstract of Deppe).

Deppe does not specifically disclose that there is a labeled grid illustrated on the base.

However, Ruddle teaches a base (see column 2, lines 19-46 of Ruddle, which describe the glass microscope slides etched with a pattern such as the pattern shown in figure 1) and a labeled grid illustrated on the base (see figure 1 of Ruddle).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Deppe to include the teachings of Ruddle so that there is a labeled grid illustrated on the base for the purpose of viewing and recording the positions of samples on a slide and to record the positions of individual metaphase spreads in chromosome preparations, as taught by Ruddle (see column 4, lines 30-44 of Ruddle).

The preamble fails to structurally limit the body of the claim. Deppe in view of Ruddle meets all of the structural limitations required by the claim in support thereof. As such, Deppe in view of Ruddle must support "an apparatus for allowing a plurality of samples on a single slide to be organized and stained" in the same way as the structure of the claim.

10. As to claim 5, Deppe in view of Ruddle disclose that the grid is drawn on the base in the area defined by the base and the three walls (see figure 2, elements 3 and 4 of Deppe and see column 2, lines 19-46 and figure 1 of Ruddle), said grid consisting of a matrix and appropriate labels (see column 2, lines 19-46 and figure 1 of Ruddle), said labels consisting of letters along one side of the array, and numbers along the other side of the array (see figure 1 of Ruddle; it is noted that the first side could be chosen to

be either side of the array since both contain letters and numbers and then the other side can be chosen to be the remaining side).

11. As to claim 6, Deppe in view of Ruddle disclose a protruding thumb-grip for gripping the holder (see figures 1 and 2 of Deppe, the bottom lip that protrudes around the bottom of the holding frame '1').

12. As to claim 7, Deppe discloses a method for using a slide holder (see figure 2, element 1 of Deppe) comprising: the step of inserting the slide (see figure 2, element 3 of Deppe) into a holder via a side of the holder without a wall (see figure 2 of Deppe).

Deppe does not specifically disclose the step of noting in which grid location within a microarray each sample is located.

However, Ruddle teaches a base (see column 2, lines 19-46 of Ruddle, which describe the glass microscope slides etched with a pattern such as the pattern shown in figure 1) and a labeled grid illustrated on the base (see figure 1 of Ruddle) and a step of noting in which grid location within the grid each sample is located (see column 4, lines 23-29 of Ruddle).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of using the apparatus of Deppe to include the teachings of Ruddle so that there is a labeled grid illustrated on the base and there is a step of noting in which grid location within the grid each sample is located for the purpose of viewing and recording the positions of samples on a slide and to record the positions of individual metaphase spreads in chromosome preparations, as taught by Ruddle (see column 4, lines 23-44 of Ruddle).

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13. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deppe et al, International Publication WO 02/18052 A1 (hereafter Deppe) in view of Ruddell et al, U.S. Patent Number 4,415,405 (hereafter Ruddell) as applied to claims 1 and 5-7 above, and further in view of Goldsmith, U.S. Patent Number 4,190,314 (hereafter Goldsmith).

14. As to claims 2-4, Deppe in view of Ruddell disclose a base (see figure 2, element 3 of Deppe and see column 2, lines 19-46 and figure 1 of Ruddell) comprised of a thin, inflexible sheet of plastic, or other appropriate material (see column 2, lines 19-46 of Ruddell, i.e. glass). Deppe in view of Ruddell further disclose that the walls comprise a continuous, raised boundary around the consecutive sides of the base (see figure 2, element 4 of Deppe). Finally, Deppe in view of Ruddell disclose that the four semi-circular tabs are formed at the top of and perpendicular to the walls (see figure 2, element 6 of Deppe).

Deppe in view of Ruddell do not specifically disclose that the base is of a size slightly bigger in width and length than the slide to be used in conjunction with the base or that the walls create a surface on the base the proper size for securing a slide within the area formed between the walls and the base. Also, Deppe in view of Ruddell do not specifically disclose that the four semi-circular tabs are formed in such a manner as to create a space between the tabs and the base the proper width to secure a slide between the tabs and the base.

However, Goldsmith teaches a labeled cover plate (see figure 3, element 13a of Goldsmith), smaller than the slide (see figure 3, element 10a of Goldsmith), to be placed

on top of the slide (see figure 3 and column 4, lines 3-12 of Goldsmith; it is noted that the slide has been interpreted to be the base and the cover plate has been interpreted to be the slide).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Deppe in view of Ruddell to include the teachings of Goldsmith so that the base is of a size slightly bigger in width and length than the slide to be used in conjunction with the base and so that the walls create a surface on the base the proper size for securing a slide within the area formed between the walls and the base, and finally so that the four semi-circular tabs are formed in such a manner as to create a space between the tabs and the base the proper width to secure a slide between the tabs and the base for the purpose of securely supporting and holding the slide to the base.

#### ***Other Related Art***

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
16. Deppe et al, U.S. Patent Application Publication 2003/0184745 A1 was relied upon as a translation of Deppe et al, International Publication WO 02/18052 A1.

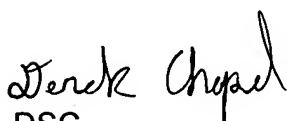


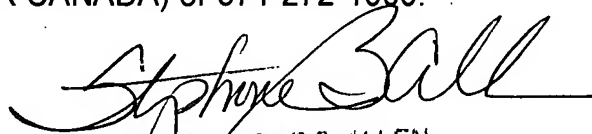
**Conclusion**

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Derek S. Chapel whose telephone number is 571-272-8042. The examiner can normally be reached on M-F 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephone B. Allen can be reached on 571-272-2434. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
DSC  
9/5/2007

  
STEPHONE B. ALLEN  
SUPERVISORY PATENT EXAMINER